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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,079	02/26/2002	Dominik Schutz	TRW(ASG)6052	4699
26294	7590	06/21/2004	EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 526 SUPERIOR AVENUE, SUITE 1111 CLEVEVLAND, OH 44114			LUONG, VINH	
			ART UNIT	PAPER NUMBER

3682

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,079

Applicant(s)

SCHUTZ, DOMINIK

Examiner

Vinh T Luong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Vinh T. Luong
Primary Examiner

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachments 1 & 2.

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 7, 2004 has been entered.

2. The replacement drawings were received on March 8, 2004. These drawings are unacceptable by the Examiner because Applicant does not: (a) identify the replacement drawing sheet in the top margin as "Replacement Sheet"; and (b) include all of the figures. For example, Fig. 3 is missing. See information on how to effect drawing changes below.

3. **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet *must* be identified in the top margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the Examiner, Applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless Applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the Examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

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Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

4. The drawings are objected to because Fig. 1 should have referential numerals 62 and 64 to designate the electrical contact in claim 1. Corrected drawing sheet set forth in the information on how to effect drawing changes above are required in reply to the Office action to avoid abandonment of the application.

5. The *original* drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features, such as, the foam casing in claims 1 and 12-14, and the plastic housing in claim 5 must be shown or the features canceled from the claims. No new matter should be entered.

The original Fig. 1 shows that the element 12 is made of sand or the like in accordance with the drawing symbols for draftspersons in MPEP 608.02. Similarly, claim 5 calls for the plastic housing 16, however, the original Figs. 1-5 do not show the drawing symbol for plastic in MPEP 608.02.

6. The original disclosure is objected to because of the following informalities: the specification and the claims are inconsistent with the original drawings. For example, claim 1 claims the foam casing 12, however, the original Fig. 1 shows that the element 12 is made of sand or the like in accordance with the drawing symbols for draftspersons in MPEP 608.02.

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Similarly, claim 5 calls for the plastic housing 16, however, the original Figs. 1-5 do not show the drawing symbol for plastic in MPEP 608.02. Appropriate correction is required.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

It is unclear whether:

(A) The terms that appears at least twice, such as, "an axial direction" in claims 1 and 12-14, "a gas bag module" in claim 2, and "a gas bag" in claim 3 refer to the same or different things. See MPEP 2173.05(o); and

(B) A confusing variety of terms, such as, "a housing" in claim 1 and "a cup-shaped receiving housing" in claim 3 refer to the same or different things. See MPEP 608.01(o) and 2173.05(o).

9. Claims 1-4, 6-11, and 13, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Bohn et al. (EP 0 945 310 A2 cited by Applicant which corresponds to US Patent No. 6,312,012 B1.)

The Examiner respectfully submits that in the rejection below, the Examiner refers to Pat.'012 for convenience since it is in English. The rejection is based on EP 0 945 310 A2 because the publication date of EP'310 (September 29, 1999) was earlier than the publication date of Pat.'012 (November 6, 2001).

Regarding claim 1, Bohn teaches a vehicle steering wheel having an axis, said steering wheel comprising:

a skeleton 1-3 embedded in a foam casing 4; and

a covering cap 6 having an edge 24 (Fig. 1), said covering cap 6 for actuation of a horn (see lines 29-41, column 1 of Pat.'012) being mounted so as to be *displaceable* in an axial direction (see lines 10-20, column 4 of Pat.'012), said foam casing 4 of said skeleton 1-3 adjoining said edge 24 of said covering cap 6;

a gas bag module 5 including a housing 17, said housing 17 being open towards said covering cap 6 and adapted to receive a gas bag 16, said housing 17 having an electrical contact 18 *displaceable* with said covering cap 6 for a predetermined distance in an axial direction into contact with a corresponding electrical contact 14 disposed on said steering wheel; and

a plurality of guides 10 or 10, 26 for guiding displacement of said covering cap 6, said guides 10 or 10, 26 being provided in a region 24 of said edge 24 of said covering cap 6 (Fig. 1), said guides 10 or 10, 26 being arranged and elastically mounted such that upon laterally pressing down said covering cap 6 for said predetermined distance by a force *suitable* for actuating said horn, said guides 10 or 10, 26 are tilted by an amount allowed by a yielding of said foam casing 4.

Claim 1 and other claims below are anticipated by Bohn since Bohn teaches each positive claimed element. On the one hand, note that the term, such as, "*displaceable*" is a relative term, particularly since virtually any thing will be displaced if enough force or pressure is applied to it. See "flexible" or "flexibility" in *Fredman v. Harris-Hub Co., Inc.*, 163 USPQ 397 (DC NIII

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1969). On the other hand, Applicant's recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then, it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding claim 2, a gas bag module 5 is provided which is closed by said covering cap 6 and which together with said covering cap 6 is mounted so as to be *displaceable* in said axial direction, said guides 10 or 10, 26 being connected with said gas bag module 5. See line 5 *et seq.*, column 3 of Pat. '012.

Regarding claim 3, said gas bag module 5 has a cup-shaped receiving housing 17 which is open toward said covering cap 6 and adapted to receive a gas bag 16, an edge of said receiving housing 17 having extensions 17 (Fig. 2, see Attachment 1) projecting laterally outwards and toward said edge 24 of said covering cap 6, said guides 10 or 10, 26 being provided on said extensions 17.

Regarding claim 4, said guides 10 or 10, 26 are bolts 10 or 10, 26 which are formed in one piece on said receiving housing 17.

Regarding claim 6, a detent connection 29 is provided between said skeleton 1-3 and said gas bag module 5 to support said gas bag module 5. See line 49 *et seq.*, column 3 of Pat. '012.

Regarding claim 7, restoring springs 15 are provided, said guides are bolts 10 or 10, 26 which extend through said restoring springs 15.

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Regarding claim 8, bearing bushes 13 are provided, said guides are bolts 10 or 10, 26 which are inserted in said bearing bushes 13, said bearing bushes 13 are fixedly mounted on said bolts 10 or 10, 26 in said axial direction and are pressed into said foam casing 4.

Regarding claim 9, said guides 10 or 10, 26 are received in said covering cap 6 so as to inherently have no lateral play (Figs. 1-3).

Regarding claim 10, said module 5 has a front side and said covering cap 6 covers said module 5 entirely on said front side (Figs. 1 and 2).

Regarding claim 11, said guides 10 or 10, 26 are not directly connected with each other as seen in Fig. 2.

Regarding claim 13, Bohn teaches a steering wheel having an axis, said steering wheel comprising:

- a skeleton 1-3 embedded in a foam casing 4, said foam casing 4 having a plurality of recesses 9;

- a covering cap 6 having an edge 24 (Fig. 1), said covering cap 6 for actuation of a horn, being mounted so as to be *displaceable* in an axial direction, said foam casing 4 of said skeleton 1-3 adjoining said edge 24 of said covering cap 6;

- a gas bag module 5 including a housing 17, said housing 17 being open towards said covering cap 6 and adapted to receive a gas bag 16, said housing 17 having an electrical contact 18 *displaceable* with said covering cap 6 for a predetermined distance in an axial direction into contact with a corresponding electrical contact 14 disposed on said steering wheel;
- and

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a plurality of guides 10 or 10, 26 for guiding displacement of said covering cap 6, said guides 10 or 10, 26 being provided in a region 24 of said edge 24 of said covering cap 6, said guides 10 or 10, 26 being arranged and elastically mounted such that, upon laterally pressing down said covering cap 6 for said predetermined distance by a force *suitable* for actuating said horn, said guides 10 or 10, 26 are tilted by an amount allowed by a yielding of said foam casing, each of said guides 10 or 10, 26 being arranged for axial movement in a corresponding one of said plurality of recesses 9 of said foam casing 4.

10. Claim 5, as best understood, is rejected under 35 U.S.C. 103(a) as obvious over Bohn et al. (EP 0 945 310 A2 cited by Applicant).

Bohn teaches to form the guides of suitable synthetic material in order to be able to take up the reaction forces occurring on actuation of the gas bag. See lines 21-31, column 4 of Pat.'012. Plastic is a notoriously well-known material in the art of steering wheel as evidenced by Bohn's teachings. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) and MPEP 2144.07. To form the housing of plastic is considered as an extension of Bohn's suggestion of the use of plastic material for the guides to be able to take up the reaction forces occurring on actuation of the gas bag.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form both Bohn's receiving housing and guides of plastic in order to be able to take up the reaction forces occurring on actuation of the gas bag as suggested by Bohn.

11. Claims 12 and 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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12. As allowable subject matter has been indicated, Applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

13. Applicant's arguments filed April 7, 2004 have been fully considered but they are not persuasive.

DRAWINGS

Applicant's drawing correction has been disapproved for the reason set forth in paragraph 2 above.

35 USC 102(b)

Applicant states:

In relying on the theory of inherency, an Examiner must provide a basis in fact to reasonably support that the allegedly inherent feature necessarily flows from the teaching of the reference. MPEP § 2112. One of ordinary skill in the art would not recognize that the studs (10 or 26) of Bohn et al. necessarily tilt when the cover cap (6) is axially depressed, for the following reasons:

1. Bohn et al. do not state anywhere in the reference that the studs (10 or 26) tilt.
2. Bohn et al. disclose a radially extending flange (11 in Fig. 1) and a washer (13 in Fig. 2) that provide a radially extending surface that would prevent the studs (10) from tilting.
3. Bohn et al. disclose a cover cap (6) that will yield when the edge of the cover cap (6) is depressed such that none of the studs (10 or 26) tilt.

The Examiner agrees with Applicant's statement of the law. In addition, the Examiner respectfully submits that 35 USC § 102 reference needs not provide such explanation to anticipate when an artisan would know as evidenced by standard text book. *In re Opprecht*, 12 USPQ2d 1235 (CAFC 1989). Further, it is well settled that anticipation law requires distinction

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be made between invention described or taught and invention claimed. It does not require that the reference "teach" what subject patent application teaches, it is only necessary that the claim under attack, as construed by the Court, "*read on*" something disclosed in the reference, *i.e.*, all limitations of the claim are found in reference, or are "*fully met*" by it. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781, 789 (CAFC 1983).

With respect to Applicant's first assertion that "Bohn et al. do not state anywhere in the reference that the studs (10 or 26) tilt," the Examiner respectfully submits that Bohn does not need to provide such explanation to anticipate when an artisan would know as evidenced by standard text book. *In re Opprecht, supra*. In the instant case, if a sufficient force is applied to the cover cap of Bohn et al., the bolts 10 will inherently tilt since virtually any thing will be tilted, displaced, or collapsed if enough force or pressure is applied to it. See *Fredman v. Harris-Hub Co., Inc., supra*. In fact, *Webster's II New Riverside University Dictionary* defines: "tilt: to forge with a tilt hammer." If one uses a tilt hammer to hit on Bohn's casing 6 in the direction F shown in the Attachment, the stud 10 inherently is tilted or displaced based on ordinary and customary meaning of the term.

More importantly, Applicant admitted in the Amendment filed on July 30, 2003:

The patent to Bohn et al. discloses that mounting tab 17 with dished recess 19 has a through hole 20 whose diameter is larger than the outer diameter of the mounting stud 10. This clearance is to aid in placement of the module into the foam. (Bohn et al. col. 3 lines 12-15). The patent to Bohn et al. also discloses that the mounting plate 30, (part of mounting tab 17) is the same in Figs. 1 and 2 and that the horn contacts located on the mounting tab 17 may be depressed parallel to the steering wheel axis or may be tilted to actuate the horn switch. (Bohn et al. col. 3 lines 42-46).

The clearance space created by through hole 20 between mounting tab 17 and the mounting stud precludes any transfer of movement

from the mounting tab to the stud 10. Thus, the stud 10 of Bohn et al. is not tilted during actuation of the horn switch.

*Even if a large force is applied to the cover cap of Bohn et al., the bolts 10 will not inherently tilt. The cover cap wall 25 at the upper portion of bolt 10 will yield before **the bolts will tilt**. The cap will yield before **the bolts will tilt** because the bolts are stabilized against tilting by virtue of a relatively large surface area contact between the flange 11 on bolt 10 and the adjacent foam plateau compared with the small surface area contact between the thin walled section 25 of cover cap and the top section of the bolt 10. Thus, claim 1 should be allowed.*

Therefore, Applicant's new assertion that "[o]ne of ordinary skill in the art would not recognize that the studs (10 or 26) of Bohn et al. necessarily tilt when the cover cap (6) is axially depressed" is in direct conflict with Applicant's previous admission above and Bohn et al.'s express description in Bohn'012, column 3, lines 42-46.

With respect to Applicant's second contention that "Bohn et al. disclose a radially extending flange (11 in Fig. 1) and a washer (13 in Fig. 2) that provide a radially extending surface that would prevent the studs (10) from tilting," the Examiner respectfully submits that Bohn's casing 6 is made of foamed material, thus, it is flexible. Moreover, Bohn's casing 6 and guides 10, 26 are integrally connected together as transparently shown in Fig. 3. Thus, if the driver applies an inclined force F (see Attachment 1) at a region of the outer edge of Bohn's casing 6, the casing 6 is inherently flexed or tilted downwardly, hence, the guide 10, 26 is tilted therewith. The flange 11 and a washer 13 do not prevent the studs 10 from tilting because the flange 11 and washer 13 are tilted therewith the studs 10.

On the other hand, Bohn's flange 11 and washer 13 are similar to the flange of Applicant's bearing bushing 42 in Fig. 5 (see Attachment 2), *a fortiori*, they are expected to behave similarly. In other words, when one applies a sufficient inclined force at the region of the

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edge of Bohn's casing 6, Bohn's flange 11 and washer 13 do not prevent the tilting of the studs 10 in the same manner shown in Applicant's Figs. 4a and 4b. *In re Merck & Co., Inc.*, 231 USPQ 375 (CAFC 1986) and *In re King*, 231 USPQ 136 (CAFC 1986).

Third, with respect to Applicant's assertion that "Bohn et al. disclose a cover cap (6) that will yield when the edge of the cover cap (6) is depressed such that none of the studs (10 or 26) tilt," this assertion overlooks the fact that the upper part of the stud 10 is located within the guide recess 25' of the casing 6. Consequently, the movement of the casing 6 is transmitted to the stud 10 via the guides 25', and the stud 10 of Bohn is tilted when the casing 6 is tilted during actuation of the horn switch. Simply put, Bohn's cover cap 6 and studs 10 or 26 are similar to Applicant's cover cap 26 and studs 32, therefore, Bohn's cover cap 6 will yield when Bohn's edge 24 of Bohn's cover cap 6 is depressed resulting in tilting of Bohn's studs 10 or 26 in the same manner as Applicant's cap 26 and studs 32. *In re Merck & Co., Inc.* and *In re King, supra*.

It is noteworthy that Applicant previously admitted on July 30, 2003 that *the cover cap wall 25 at the upper portion of bolt 10 will yield before the bolts will tilt. The cap will yield before the bolts will tilt because the bolts are stabilized against tilting by virtue of a relatively large surface area contact between the flange 11 on bolt 10 and the adjacent foam plateau compared with the small surface area contact between the thin walled section 25 of cover cap and the top section of the bolt 10.*" In a few words, Applicant admitted that Bohn's bolt/guides 10 are inherently tilted. The fact that Bohn's guides 10 are tilted before or after the casing 6 is tilted is immaterial because Applicant's claim 1 does not specifically claim such steps. *Kalman v. Kimberly Clark Corp., supra*. Assuming *arguendo* that claim 1 calls for such steps, note that the patentability of product-by-process is not dependent upon the process. Applicant's recitation

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with respect to the manner in which Applicant's claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus when the prior art apparatus teaches all the structural limitations of the claims. *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987) and MPEP 2114.

For the reasons set forth above, the rejection of claims 1-11 and 13 is maintained.

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vinh T. Luong whose telephone number is 703-308-3221. The Examiner can normally be reached on Monday - Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

June 7, 2004



Vinh T. Luong
Primary Examiner

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ATTACHMENT 1

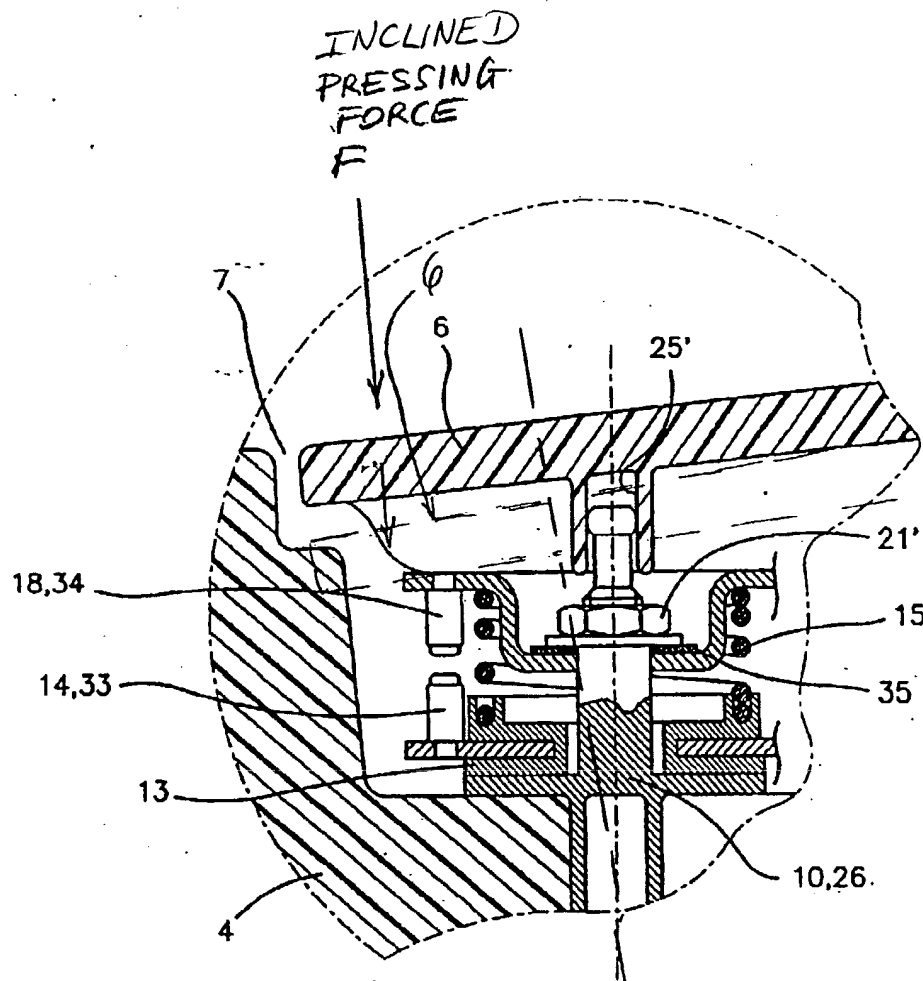


Fig.3

ATTACHMENT # 1
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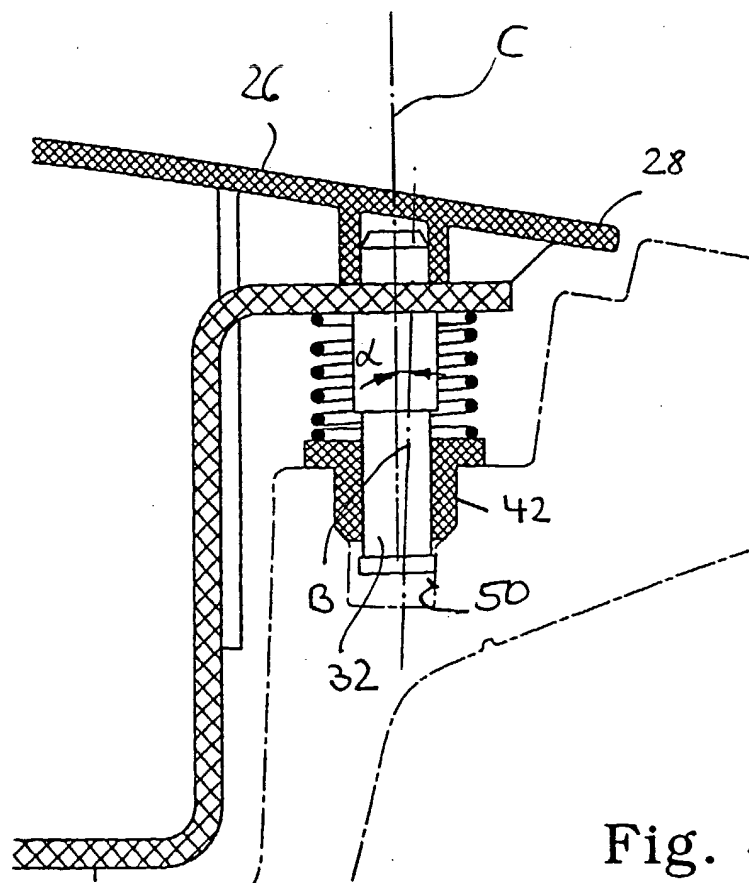
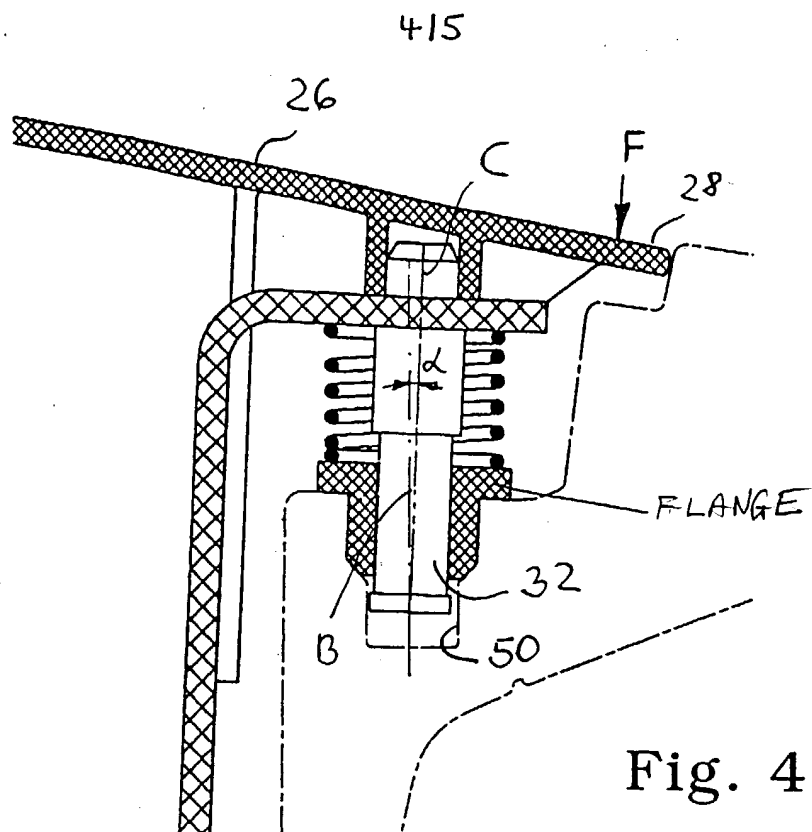
Application/Control Number: 10/083,079

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ATTACHMENT 2

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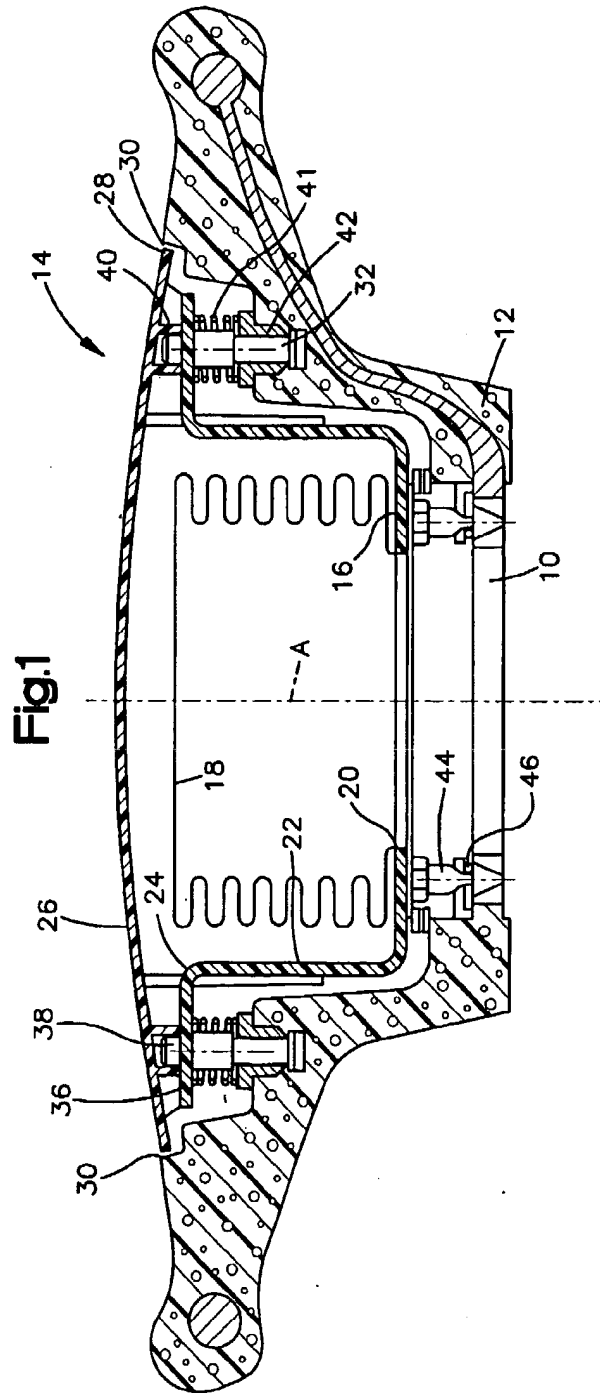
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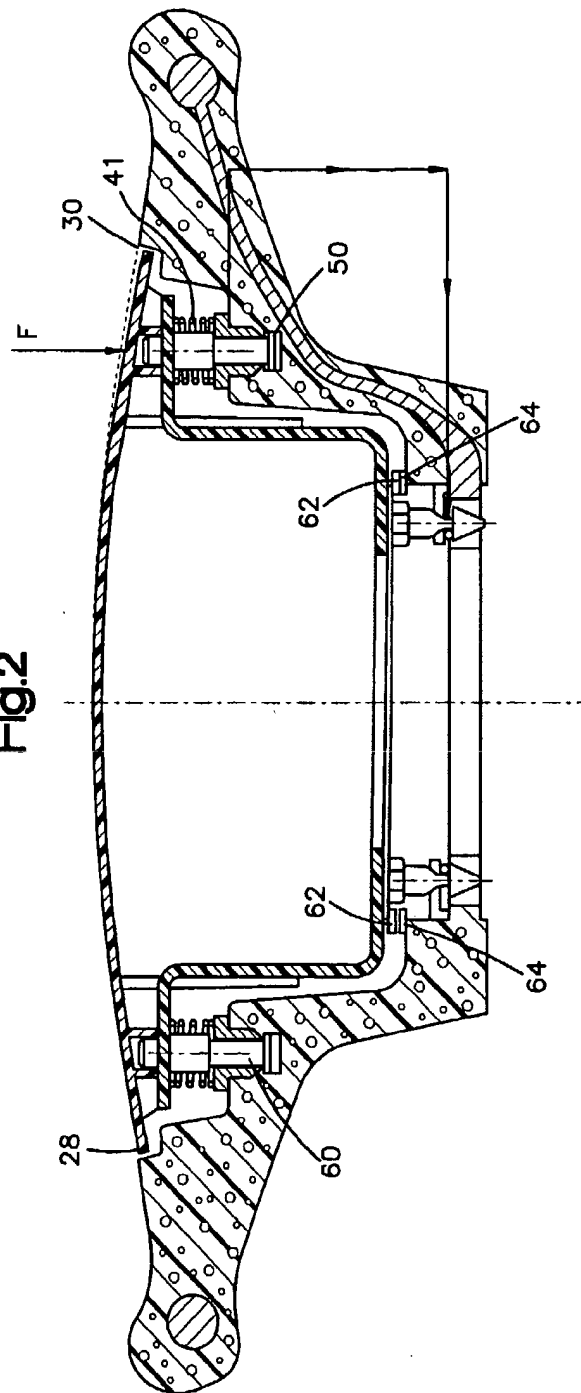
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Fig.2





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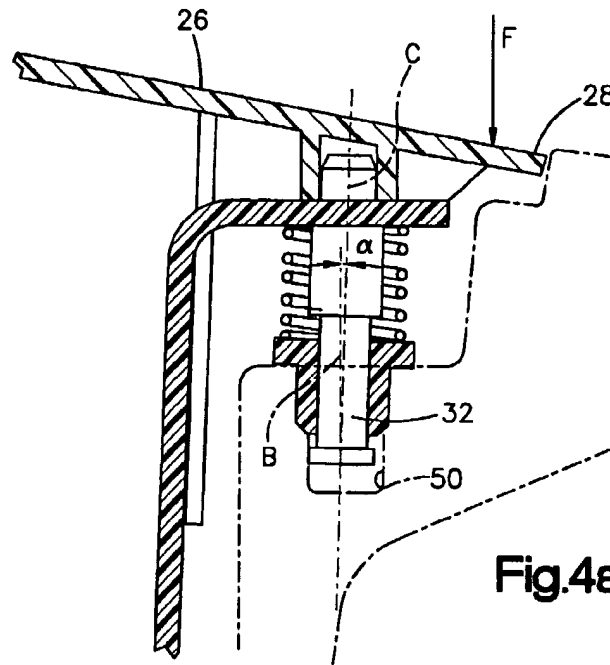


Fig. 4a

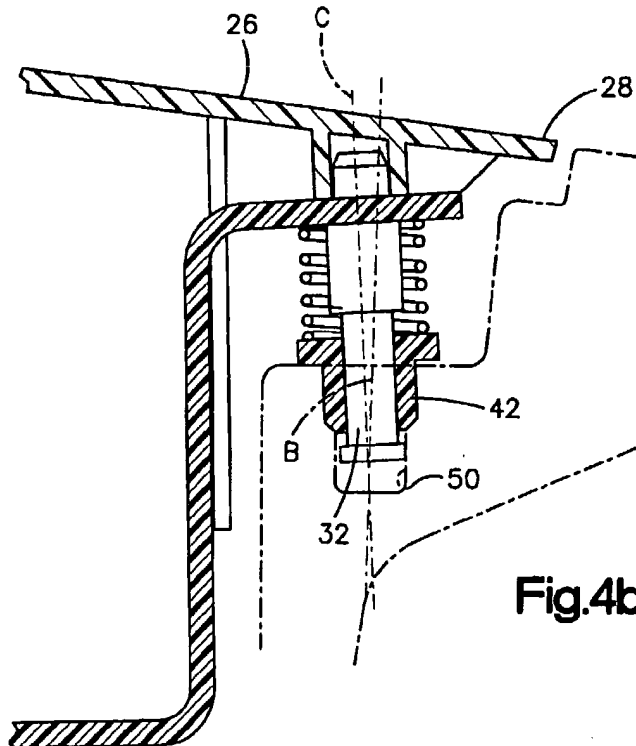


Fig. 4b

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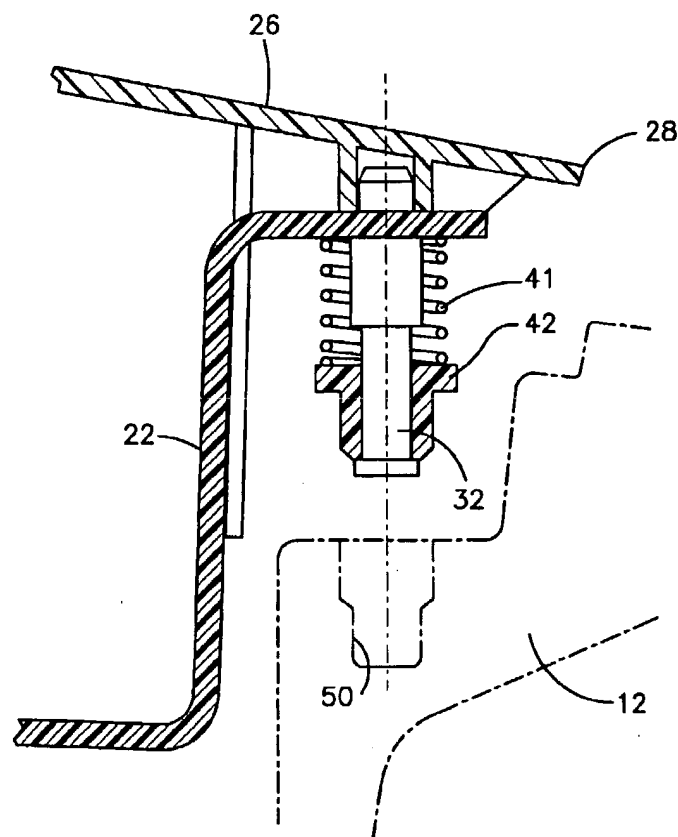


Fig.5